§ 32.72

waste disposal requirements set out in \$20,2001

[33 FR 16553, Nov. 14, 1968, as amended at 38 FR 34110, Dec. 11, 1973; 39 FR 26148, July 17, 1974; 40 FR 8786, Mar. 3, 1975; 42 FR 21604, Apr. 28, 1977; 42 FR 26987, May 26, 1977; 44 FR 50325, Aug. 28, 1979; 56 FR 23472, May 21, 1991; 58 FR 67660, Dec. 22, 1993; 72 FR 55929, Oct. 1, 2007]

Subpart C—Specifically Licensed Items

- § 32.72 Manufacture, preparation, or transfer for commercial distribution of radioactive drugs containing byproduct material for medical use under part 35.
- (a) An application for a specific license to manufacture, prepare, or transfer for commercial distribution radioactive drugs containing byproduct material for use by persons authorized pursuant to part 35 of this chapter will be approved if:
- (1) The applicant satisfies the general requirements specified in 10 CFR 30.33;
- (2) The applicant submits evidence that the applicant is at least one of the following:
- (i) Registered with the U.S. Food and Drug Administration (FDA) as the owner or operator of a drug establishment that engages in the manufacture, preparation, propagation, compounding, or processing of a drug under 21 CFR 207.20(a);
- (ii) Registered or licensed with a state agency as a drug manufacturer;
- (iii) Licensed as a pharmacy by a State Board of Pharmacy;
- (iv) Operating as a nuclear pharmacy within a Federal medical institution; or
- (v) A Positron Emission Tomography (PET) drug production facility registered with a State agency.
- (3) The applicant submits information on the radionuclide; the chemical and physical form; the maximum activity per vial, syringe, generator, or other container of the radioactive drug; and the shielding provided by the packaging to show it is appropriate for the safe handling and storage of the radioactive drugs by medical use licensees: and
- (4) The applicant satisfies the following labeling requirements:

- (i) A label is affixed to each transport radiation shield, whether it is constructed of lead, glass, plastic, or other material, of a radioactive drug to be transferred for commercial distribution. The label must include the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL"; the name of the radioactive drug or its abbreviation; and the quantity of radioactivity at a specified date and time. For radioactive drugs with a half life greater than 100 days, the time may be omitted.
- (ii) A label is affixed to each syringe, vial, or other container used to hold a radioactive drug to be transferred for commercial distribution. The label must include the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL" and an identifier that ensures that the syringe, vial, or other container can be correlated with the information on the transport radiation shield label.
- (b) A licensee described by paragraph (a)(2)(iii) or (iv) of this section:
- (1) May prepare radioactive drugs for medical use, as defined in 10 CFR 35.2, provided that the radioactive drug is prepared by either an authorized nuclear pharmacist, as specified in paragraphs (b)(2) and (b)(4) of this section, or an individual under the supervision of an authorized nuclear pharmacist as specified in 10 CFR 35.27.
- (2) May allow a pharmacist to work as an authorized nuclear pharmacist if:
- (i) This individual qualifies as an authorized nuclear pharmacist as defined in 10 CFR 35.2.
- (ii) This individual meets the requirements specified in §35.55(b) and 35.59 of this chapter, and the licensee has received an approved license amendment identifying this individual as an authorized nuclear pharmacist; or
- (iii) This individual is designated as an authorized nuclear pharmacist in accordance with paragraph (b)(4) of this section.
- (3) The actions authorized in paragraphs (b)(1) and (b)(2) of this section are permitted in spite of more restrictive language in license conditions.

- (4) May designate a pharmacist (as defined in §35.2 of this chapter) as an authorized nuclear pharmacist if:
- (i) The individual was a nuclear pharmacist preparing only radioactive drugs containing accelerator-produced radioactive material, and
- (ii) The individual practiced at a pharmacy at a Government agency or Federally recognized Indian Tribe before November 30, 2007 or at all other pharmacies before August 8, 2009, or an earlier date as noticed by the NRC.
 - (5) Shall provide to the Commission:
- (i) A copy of each individual's certification by a specialty board whose certification process has been recognized by the Commission or an Agreement State as specified in §35.55(a) of this chapter with the written attestation signed by a preceptor as required by §35.55(b)(2) of this chapter; or
- (ii) The Commission or Agreement State license, or
- (iii) Commission master materials licensee permit, or
- (iv) The permit issued by a licensee or Commission master materials permittee of broad scope or the authorization from a commercial nuclear pharmacy authorized to list its own authorized nuclear pharmacist, or
- (v) Documentation that only accelerator-produced radioactive materials were used in the practice of nuclear pharmacy at a Government agency or Federally recognized Indian Tribe before November 30, 2007 or at all other locations of use before August 8, 2009, or an earlier date as noticed by the NRC; and
- (vi) A copy of the State pharmacy licensure or registration, no later than 30 days after the date that the licensee allows, under paragraphs (b)(2)(i) and (b)(2)(ii) of this section, the individual to work as an authorized nuclear pharmacist.
- (c) A licensee shall possess and use instrumentation to measure the radioactivity of radioactive drugs. The licensee shall have procedures for use of the instrumentation. The licensee shall measure, by direct measurement or by combination of measurements and calculations, the amount of radioactivity in dosages of alpha-, beta-, or photonemitting radioactive drugs prior to

transfer for commercial distribution. In addition, the licensee shall:

- (1) Perform tests before initial use, periodically, and following repair, on each instrument for accuracy, linearity, and geometry dependence, as appropriate for the use of the instrument; and make adjustments when necessary: and
- (2) Check each instrument for constancy and proper operation at the beginning of each day of use.
- (d) Nothing in this section relieves the licensee from complying with applicable FDA, other Federal, and State requirements governing radioactive drugs.

[59 FR 61780, Dec. 2, 1994; 59 FR 65244, Dec. 19, 1994, as amended at 60 FR 324, Jan. 4, 1995; 67 FR 20370, Apr. 24, 2002; 67 FR 62872, Oct. 9, 2002; 67 FR 77652, Dec. 19, 2002; 71 FR 15007, Mar. 27, 2006; 72 FR 45150, Aug. 13, 2007; 72 FR 55929, Oct. 1, 2007]

§ 32.74 Manufacture and distribution of sources or devices containing byproduct material for medical use.

- (a) An application for a specific license to manufacture and distribute sources and devices containing byproduct material to persons licensed under part 35 of this chapter for use as a calibration, transmission, or reference source or for the uses listed in §§ 35.400, 35.500, 35.600, and 35.1000 of this chapter will be approved if:
- (1) The applicant satisfies the general requirements in §30.33 of this chapter;
- (2) The applicant submits sufficient information regarding each type of source or device pertinent to an evaluation of its radiation safety, including:
- (i) The byproduct material contained, its chemical and physical form, and amount:
- (ii) Details of design and construction of the source or device;
- (iii) Procedures for, and results of, prototype tests to demonstrate that the source or device will maintain its integrity under stresses likely to be encountered in normal use and accidents;
- (iv) For devices containing byproduct material, the radiation profile of a prototype device;
- (v) Details of quality control procedures to assure that production sources and devices meet the standards of the design and prototype tests;